

WHAT IS CLAIMED IS:

1. An emulsion type adhesive applicable for over-laminating films, the emulsion type adhesive comprising:

(a) 60 to 99.5 parts per hundred of monomers of one or more alkyl acrylates containing 4-12 carbon atoms on an alkyl group;

(b) 0.5 to 40 parts per hundred of monomers of an alkyl acrylate containing 1-3 carbon atoms in an alkyl group;

(c) 0.1 to 5 parts per hundred of monomers of dicarboxylic acids;

(d) 1 to 5 parts per hundred of a reactive surfactant;

(e) 0.1 to 15 parts per hundred of an organic acid vinyl ester; and

(f) 100 parts per hundred of soft water,

wherein a total weight of (a) and (b) is 100 parts by hundred, while (c), (d), (e) and (f) are calculated relative to the total weight of (a) and (b).

2. An emulsion type adhesive applicable for over-laminating films, the emulsion type adhesive comprising:

(a) 60 to 99.5 parts per hundred of monomers of one or more alkyl acrylates containing 4-12 carbon atoms on an alkyl group;

(b) 0.5 to 40 parts per hundred of monomers of an alkyl methacrylate containing 1-6 carbon atoms in an alkyl group;

(c) 0.1 to 5 parts per hundred of monomers of dicarboxylic acids;

(d) 1 to 5 parts per hundred of a reactive surfactant;

(e) 0.1 to 15 parts per hundred of an organic acid vinyl ester; and

(f) 100 parts per hundred of soft water,

wherein a total weight of (a) and (b) is 100 parts by hundred, while (c), (d), (e) and (f) are calculated relative to the total weight of (a) and (b).

3. The emulsion type adhesive of claim 1 or 2, wherein the alkyl acrylate containing 4-12 carbon atoms on the alkyl group is selected from the group consisting of butyl acrylate, 2-ethyl hexyl acrylate, i-butyl acrylate, n-triethyl acrylate and i-octyl acrylate.

4. The emulsion type adhesive of claim 1, wherein the alkyl acrylate containing 1-3 carbon atoms in the alkyl group is ethyl acrylate or methyl acrylate

5. The emulsion type adhesive of claim 2, wherein the alkyl methacrylate containing 1-6 carbon atoms in the alkyl group is selected from the group consisting of methyl methacrylate, ethyl methacrylate and butyl methacrylate.

6. The emulsion type adhesive of claim 1 or 2, wherein the dicarboxylic acid is selected from the group consisting of maleic acid, fumaric acid, itaconic acid and citraconic acid.

7. The emulsion type adhesive of claim 1 or 2, wherein the reactive surfactant is selected from the group consisting of an allyl surfactant, an 2-propenyl surfactant, a maleic surfactant, an itaconic surfactant and an acryl surfactant.

8. The emulsion type adhesive of claim 1 or 2, wherein the organic acid vinyl ester is selected from the group consisting of vinyl acetate, vinyl butyrate, vinyl propionate, vinyl isobutyrate and vinyl 2-ethyl hexoate.

9. A method for preparing an emulsion type adhesive applicable for over-laminating films, the method comprising:

(a) mixing an alkyl acrylate containing 4-12 carbon atoms on an alkyl group, an alkyl acrylate containing 1-3 carbon atoms in an alkyl group or an alkyl methacrylate

containing 1-6 carbon atoms in an alkyl group, a dicarboxylic acid, soft water and an organic acid vinyl ester, and then adding a reactive surfactant so as to obtain a pre-emulsion; and

(b) adding at least an oxidizing agent and a reducing agent to the pre-emulsion,  
5 followed by stirring, heating and reacting to obtain an emulsion type adhesive.

10. The method of claim 9, wherein a heating temperature in the step (b) is about 25°C-55°C.

11. The method of claim 9, wherein the alkyl acrylate containing 4-12 carbon atoms on the alkyl group is selected from the group consisting of butyl acrylate, 2-ethyl  
10 hexyl acrylate, i-butyl acrylate, n-triethyl acrylate and i-octyl acrylate.

12. The method of claim 9, wherein the alkyl acrylate containing 1-3 carbon atoms in the alkyl group is ethyl acrylate or methyl acrylate

13. The method of claim 9, wherein the alkyl methacrylate containing 1-6 carbon atoms in the alkyl group is selected from the group consisting of methyl methacrylate,  
15 ethyl methacrylate and butyl methacrylate.

14. The method of claim 9, wherein the dicarboxylic acid is selected from the group consisting of maleic acid, fumaric acid, itaconic acid and citraconic acid.

15. The method of claim 9, wherein the reactive surfactant is selected from the group consisting of an allyl surfactant, an 2-propenyl surfactant, a maleic surfactant, an  
20 itaconic surfactant and an acryl surfactant.

16. The method of claim 9, wherein the organic acid vinyl ester is selected from the group consisting of vinyl acetate, vinyl butyrate, vinyl propionate, vinyl isobutyrate and vinyl 2-ethyl hexoate.

17. The method of claim 9, wherein the oxidizing agent is t-butyl peroxide and the reducing agent is Rongalite.

18. An over-laminating tape comprises an emulsion type adhesive as claimed in claim 1 or claim 2, wherein the over-laminating tape is fabricated by coating the type  
5 adhesive as claimed in claim 1 or claim 2 onto a surface of a transparent plastic film.